

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of the Claims:

Claim 1 is amended. No new matter has been added.

Claim Rejections:

Claims 1-20 and 34-43 are rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement. The rejection is respectfully traversed.

Claim 1 recites a method for adjusting a calibrating curve for a sensor calibration comprising:

- i) compiling a calibration array of data values relating to the sensor;
- ii) generating the calibration curve;
- iii) adjusting a nominal output current of the sensor a first time based on data in the calibration array;
- iv) adjusting the calibration curve based on the adjusted value of the nominal output current.

Each feature claimed above is disclosed in the original specification and satisfies the requirement of 35 U.S.C. § 112, first paragraph. In particular, the original specification discloses a method for calibrating a sensor that may include a) compiling an array of data relating to the sensor; b) adjusting a sensor parameter a first time based on data in the array; c) adjusting a curve. (Original specification, paragraph 0005) Claim 1 recites steps from paragraph 0005 and recites one additional step of generating a curve which is disclosed in paragraphs 13 and 14. (Paragraph 0005) Fig. 4 further discloses a step 50 compiling calibration array, a step 52 first I_{g0} adjustment, a step 54 curve shape adjustment.

Features of amended claim 1 are disclosed in the original specification and one of ordinary skill in the art would be able to make or use the claimed features. In particular, the Office Action dated May 17, 2007 questioned as to how the last step of “adjusting a sensor’s output current based on the calibration curve, and then adjusting the calibration curve based on the calibration data and the sensor’s current” was possible. (Office Action mailed May 17, 2007, Page 3, lines 1-4.). This rejection is moot, since the above language is currently amended in claim 1.

Each step disclosed in claim 1 satisfies the requirements of 35 U.S.C. § 112, first paragraph as discussed in greater detail below.

i) Compiling a calibration array of data values relating to the sensor.

The original specification discloses that “the calibration array may include the following elements: time, independent measured glucose points (M_g), measured blood glucose concentrations (C_0), glucose electrode readings (I_g) and oxygen electrode readings (I_o). (Original specification, paragraph 0043) With the above disclosure as a guide one of ordinary skill in the art would be able to compile the calibration array.

ii) Generating the calibration curve.

The original specification discloses that “generating a calibration curve may include compiling *a priori* empirical values of sensors similar to the sensor being calibrated. Generating a calibration curve may also include generating a calibration curve representing a sensor having a plurality of phases.” (Original specification, paragraph 0014). The above statements combined with Fig. 2 and the disclosure of Fig. 2 starting on paragraph 0033 explain how the X and Y coordinates could be calculated. Therefore one of ordinary skill in the art would be able to generate a calibration curve.

iii) Adjusting a nominal output current of the sensor based on data in the calibration array.

The nominal output current is also designated by I_{g0} . (Original specification, paragraph 0033). I_{g0} can be calculated by multiplying R (a conversion factor that is based on blood meter values) and I_0 (oxygen electrode output current). (Original specification, paragraph 0034). Step 52 in Fig. 4 is the first adjustment to the nominal glucose current (I_{g0}) and an example of the method of Step 52 is disclosed beginning paragraph 0044. Accordingly paragraphs 0044 to 0053 explain an example of how a new R' value can be calculated using a mean shift. Since I_{g0} is calculated using the R value, a change in R to R' can adjust the nominal output current. Therefore one of ordinary skill in the art would be able to adjust a nominal output current based on the disclosure in the original specification.

iv) adjusting the calibration curve based on the adjusted value of the nominal output current.

The original calibration curve can be based on *a priori* empirical values. (Original specification, paragraph 0014). However as discussed in the background section the curve must be adjusted in order to provide accurate sensor readings. One example of the curve adjustment can be accomplished by steps as disclosed in paragraphs 0054 to 0073. In those paragraphs the R' value noted above can be used to determine a new slope and intercept to create an adjusted curve. The result of this adjustment is shown in Figs. 5a-5b. Therefore one of ordinary skill in the art would be able to adjust the calibration curve using the step disclosed in the original specification.

Therefore, one reasonably skilled in the art could make or use the method recited in claim 1 from the disclosure in the original specification without undue experimentation.

Conclusion:

After amending the claims as set forth above, claims 1-20 and 34-43 are now pending in this application. Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

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Respectfully submitted,

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